

In the Claims:

Please amend Claims 1, 59, 83-84, cancel Claims 13, 72, 81-82, and add new Claim 85, all as shown below. Applicant respectfully reserves the right to prosecute any originally presented or canceled claims in a continuing or future application.

1. (Currently Amended) A method for rendering a portal graphical user interface (GUI) for a portal, comprising:

providing a set of controls, wherein the set of controls can be organized in a logical hierarchy, wherein each said control represents a corresponding graphical element in the portal GUI, wherein each said control has properties that can be read and set, wherein each said control is implemented as one or more classes in an object-oriented programming paradigm, wherein each said control has one or more methods which can be overridden to provide specialization of each said control;

traversing, using at least one processor, the logical hierarchy, wherein the traversing comprises:

associating a first theme with a first control in the set of controls;

~~rendering the first control according to the first theme;~~

~~rendering~~ associating [[any]] descendents of the first control according to the first theme unless the theme is overridden;

overriding a second control, which is a descendent of the first control, with a second theme such that the second control uses the second theme and any descendent of the second control uses the second theme unless the second theme is overridden; [[and]]

~~rendering the first control according to the first theme in parallel with rendering of the second control according to the second theme~~

using a first thread to render the first control according to the first theme, and a second thread to render the second control according to the second theme, wherein the rendering of the first control by the first thread is in parallel to the rendering of the second control by the second thread; and

after the first thread finishes rendering the first control according to the first theme and the second thread finishes rendering the second control according to the

second theme, using a mainline render to obtain rendering result for the first control from the first thread and render result for the second control from the second thread.

2. (Previously Presented) The method of claim 1 further comprising:
representing a desktop in the GUI by a desktop control, wherein the desktop is a view of a portal, and wherein the desktop control is hierarchically superior to a shell control in the GUI and to a book control in the GUI.
3. (Previously Presented) The method of claim 1 further comprising:
using a look and feel control to determine an appearance of the portal.
4. (Previously Presented) The method of claim 1 further comprising:
using a book to navigate to at least one portal page in the portal, and wherein the book is represented by a book control.
5. (Previously Presented) The method of claim 1 further comprising:
using one control of the set of controls to respond to an event raised by another control of the set of controls.
6. (Previously Presented) The method of claim 1 further comprising:
associating an interchangeable persistence mechanism with a control of the set of controls.
7. (Previously Presented) The method of claim 1 further comprising:
associating an interchangeable rendering mechanism with a control of the set of controls.
8. (Previously Presented) The method of claim 1, further comprising:
accepting a request to access the portal.
9. (Previously Presented) The method of claim 8 further comprising:
allowing the request to be a hypertext transfer protocol (HTTP) request.

10. (Previously Presented) The method of claim 8 further comprising:
originating the request from a Web browser.
11. (Previously Presented) The method of claim 1, further comprising:
generating a response from the portal.
12. (Previously Presented) The method of claim 1 further comprising:
using a control of the set of controls to represent one of: button, text field, menu, table, window, window control, title bar, pop-up window, check-box button, radio button, window frame, desktop, shell, head, body, header, footer, book, page, layout, placeholder, portlet and toggle button.
13. (Canceled).
14. (Previously Presented) The method of claim 1 further comprising:
allowing the first control to inherit the first theme from a parent control.
15. (Previously Presented) The method of claim 1 further comprising:
using the first theme to specify at least one of the appearance and functioning of a control in the GUI.
16. (Canceled).
17. (Previously Presented) The method of claim 1 further comprising:
specifying the first theme in whole or in part by a properties file.
18. (Previously Presented) The method of claim 17 further comprising:
including in the properties file at least one of: 1) cascading style sheet; 2) Java Server Page; 3) Extensible Markup Language; 4) text; 5) Hypertext Markup Language; 6) Extensible Hypertext Markup Language; 7) JavaScript; and 8) Flash MX.

19. (Previously Presented) The method of claim 17 further comprising:
using the properties file to specify at least one image.

20. (Previously Presented) The method of claim 1 further comprising:
using the GUI as a part of a portal on the World Wide Web.

21-58. (Canceled).

59. (Currently Amended) A machine readable storage medium having instructions stored thereon that when executed by a processor cause a system to:

provide a set of controls, wherein the set of controls are organized in a logical hierarchy, wherein each said control represents a corresponding graphical element in a portal graphical user interface (GUI) for a portal, wherein each said control has properties that can be read and set, wherein each said control is implemented as one or more classes in an object-oriented programming paradigm, wherein each said control has one or more methods which can be overridden to provide specialization of each said control;

traverse the logical hierarchy, wherein the traversing comprises instructions to cause the system to:

associate a first theme with a first control in the set of controls;

~~render the first control according to the first theme;~~

~~render any~~ associate descendents of the first control according to the first theme unless the theme is overridden;

override a second control, which is a descendent of the first control, with a second theme such that the second control uses the second theme and any descendent of the second control uses the second theme unless the second theme is overridden;
and

~~render the first control according to the first theme in parallel with rendering of the second control according to the second theme~~

use a first thread to render the first control according to the first theme, and a second thread to render the second control according to the second theme, wherein the rendering of the first control by the first thread is in parallel to the rendering of the second control by the second thread; and

after the first thread finishes rendering the first control according to the first theme and the second thread finishes rendering the second control according to the second theme, use a mainline render to obtain rendering result for the first control from the first thread and render result for the second control from the second thread.

60. (Previously Presented) The machine readable storage medium of claim 59, further comprising instructions stored thereon that when executed by a processor cause a system to perform the step of:

accepting a request to access the portal.

61. (Previously Presented) The machine readable storage medium of claim 59 wherein:

a desktop in the GUI is a view of the portal, wherein the desktop can be represented by a desktop control, and wherein the desktop control is hierarchically superior to a shell control in the GUI and to a book control in the GUI.

62. (Previously Presented) The machine readable storage medium of claim 59 wherein:

a look and feel control in the GUI determines the appearance of the portal.

63. (Previously Presented) The machine readable storage medium of claim 59 wherein:

a book in the GUI can be used to navigate to at least one portal page in the portal; and wherein the book is represented by a book control.

64. (Previously Presented) The machine readable storage medium of claim 59 wherein:

one of the set of controls can respond to an event raised by another of the set of controls.

65. (Previously Presented) The machine readable storage medium of claim 59 wherein:

a control can have an interchangeable persistence mechanism.

66. (Previously Presented) The machine readable storage medium of claim 59 wherein:

a control can have an interchangeable rendering mechanism.

67. (Previously Presented) The machine readable storage medium of claim 59, further comprising instructions that when executed cause the system to:
accept a request.
68. (Previously Presented) The machine readable storage medium of claim 67 wherein:
the request in a hypertext transfer protocol (HTTP) request.
69. (Previously Presented) The machine readable storage medium of claim 67 wherein:
the request originates from a Web browser.
70. (Previously Presented) The machine readable storage medium of claim 59, further comprising instructions that when executed cause the system to:
generate a response.
71. (Previously Presented) The machine readable storage medium of claim 59 wherein:
a control can represent one of: button, text field, menu, table, window, window control, title bar, pop-up window, check-box button, radio button, window frame, desktop, shell, head, body, header, footer, book, page, layout, placeholder, portlet and toggle button.
72. (Canceled).
73. (Previously Presented) The machine readable storage medium of claim 59 wherein:
the first control inherits the first theme from a parent control.
74. (Previously Presented) The machine readable storage medium of claim 59 wherein:
the first theme specifies the appearance and/or functioning of a control in the GUI.
75. (Canceled).
76. (Previously Presented) The machine readable storage medium of claim 59 wherein:
the first theme can be specified in whole or in part by a properties file.

77. (Previously Presented) The machine readable storage medium of claim 76 wherein:
the properties file can include at least one of: 1) cascading style sheet; 2) Java Server
Page; 3) Extensible Markup Language; 4) text; 5) Hypertext Markup Language; 6) Extensible
Hypertext Markup Language; 7) JavaScript; and 8) Flash MX.

78. (Previously Presented) The machine readable storage medium of claim 76 wherein:
the properties file can specify at least one image.

79. (Previously Presented) The machine readable storage medium of claim 59 wherein:
the GUI is part of a portal on the World Wide Web.

80-82. (Canceled).

83. (Currently Amended) The method of claim 1, further comprising:
including content from an external site in [[each]] at least one thread[[s]] that is used to
render one or more controls of the set of controls.

84. (Currently Amended) The method of claim 1, further comprising:
allowing ~~at least one said~~ the first thread that renders the first control to interact with
~~another said~~ the second thread that renders the second control through an event notification
mechanism.

85. (New) The method of claim 1, further comprising:
using a factory to instantiate a worker for each thread in order to render at least one
control of the set of set of controls and gathering context information for said each thread
including association of said each thread with the main thread.